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What is claimed is:

1. A method of processing information, in particular speech information, in a communication network in which the information is transmitted in pieces, in particular in packets or in slots or frames, the method comprising making calculations according to an algorithm, the algorithm comprising a multitude of subfunctions, each of the subfunctions influencing the quality of the transmitted information with different degrees of severity or importance, wherein at each instant, in particular for each piece of information, a measure of the total processing required at this instant is calculated and is compared to the total processing capability at this instant and that, in the case where the total processing required exceeds the total processing capability, performing only those subfunctions are performed that influence the transmitted information with a low degree of severity or a high degree of importance.

2. A method according to claim 1, wherein at each instant preselected subfunctions are performed which influence the transmitted information with a low degree of severity or a high degree of importance.

3. A method according to claim 2, wherein at each instant the processing required by the preselected subfunctions is calculated and the processing capability remaining after performing the preselected subfunctions is determined and that subfunctions different from the preselected subfunctions are performed according to the calculated remaining processing capability.

4. A method according to claim 1, wherein the information in the network is sent in a plurality of parallel channels having different priority levels, the information in each channel being processed, and that at each instant the measure of the total processing required for all of the parallel channels at this instant is calculated and compared, and that in the case where the required processing required exceeds the total processing capability, performing more subfunctions for channels having a high priority level than for channels having a low priority level.

5. A method according to claim 1, wherein the algorithm comprises an echo cancellation algorithm.

6. A method according to claim 5, wherein the echo cancellation algorithm function is divided into sub-functions including at least one of: filtering, filter updating, double-talk detection, non-linear processing, noise estimation, and network probing.

7. A method according to claim 6, wherein for the subfunctions of filtering, non-linear processing, filter updating, double talk detection, noise estimation, and network probing, taken in this sequential order, they are assigned degrees of severity or importance in decreasing and increasing scales respectively.

8. A method according to claim 4, wherein at each instant preselected ones of the subfunctions are always performed for each channel, the preselected ones of the sub-functions being selected to require processing not exceeding the total processing capability.

9. A method according to claim 8, wherein at each instant the remaining subfunctions not included in the preselected ones are performed in accordance with the total processing left after performing the preselected ones of the subfunctions.

10. A method according to claim 1, wherein the processing required by each of the subfunctions is determined as the number of processor instructions used by the subfunction.

11. A method according to claim 4, wherein the number of parallel channels in which information is sent in the communication network is based on an average of the processing required for performing the algorithm.

12. A method of processing information, in particular speech information, in a communication network in which the information is transmitted in pieces, in particular in packets or in slots or frames, the method comprising making calculations according to an algorithm, the algorithm comprising a multitude of subfunctions, the information in the network being sent in a plurality of parallel channels having different priority levels, wherein at each instant, in particular for each piece of information, a measure of the total processing required for all of the channels at this instant is calculated and is compared to the total processing capability at this instant and that, in the case where the total processing required exceeds the total processing capability, performing more subfunctions for channels having a high priority level than for channels having a low priority level.

13. A method according to claim 12, wherein each of the subfunctions influence the quality of the transmitted information with different degrees of severity or importance, and in said case, performing for channels having a low priority level only those of the subfunctions which influence the transmitted information with a low degree of severity or a high degree of importance.

14. A method according to claim 12, wherein the algorithm comprises an echo cancellation algorithm.

15. A method according to claim 14, wherein the echo cancellation algorithm function is divided into sub-functions including at least one of: filtering, filter updating, double-talk detection, non-linear processing, noise estimation, and network probing.

16. A method according to claim 15, wherein for the subfunctions of filtering, non-linear processing, filter updating, double talk detection, noise estimation, and network probing, taken in this sequential order, they are assigned degrees of severity or importance in decreasing and increasing scales respectively.

17. A method according to claim 12, wherein at each instant preselected ones of the subfunctions are always performed for each channel, the preselected ones of the sub-functions being selected to require processing not exceeding the total processing capability.

18. A method according to claim 17, wherein at each instant the remaining subfunctions not included in the preselected ones are performed in accordance with the total processing left after performing the preselected ones of the subfunctions.

19. A method according to claim 12, wherein the processing required by each of the subfunctions is determined as the number of processor instructions used by the subfunction.

20. A method according to claim 12, wherein the number of parallel channels in which information is sent in the communication network is based on an average of the processing required for performing the algorithm.

21. A method of processing information, in particular speech information, in a communication network in which the information is transmitted in pieces, in particular in packets or in frames, the method comprising making calculations according to an algorithm, the algorithm comprising a multitude of subfunctions, the information in the network being sent in a plurality of parallel channels having different priority levels, wherein at each instant, in particular for each piece of information, a measure of the total processing required for all of the channels at this instant is calculated and is compared to the total processing capability at this instant and that, in the case where the total processing required exceeds the total processing capability, performing some of the subfunctions for the channels in accordance with a round robin scheme.

22. A method according to claim 21, wherein the algorithm comprises an echo cancellation algorithm.

23. A method according to claim 22, wherein the echo cancellation algorithm function is divided into sub-functions including at least one of: filtering, filter updating, double-talk detection, non-linear processing, noise estimation, and network probing.

24. A method according to claim 23, wherein for the subfunctions of filtering, non-linear processing, filter updating, double talk detection, noise estimation, and network probing, taken in this sequential order, they are assigned degrees of severity or importance in decreasing and increasing scales respectively.

25. A method according to claim 21, wherein at each instant preselected ones of the subfunctions are always performed for each channel, the preselected ones of the sub-functions being selected to require processing not exceeding the total processing capability.

26. A method according to claim 25, wherein at each instant the remaining subfunctions not included in the preselected ones are performed in accordance with the total processing left after performing the preselected ones of the subfunctions.

27. A method according to claim 21, wherein the processing required by each of the subfunctions is determined as the number of processor instructions used by the subfunction.

28. A method according to claim 27, wherein the number of parallel channels in which information is sent in the communication network is based on an average of the processing required for performing the algorithm.

5   29. A processor for processing information, in particular speech information, sent in a communication network, the processor processing the information is transmitted in pieces, in particular in packets or in frames, the processor comprising calculating means for making calculations according to an algorithm comprising a multitude of subfunctions, the calculation means comprising calculation modules, each calculation module adapted to perform an
10 individual one of the subfunctions, each of the subfunctions influencing the quality of the information sent with different degrees of severity or importance, the processor further comprising control means for determining, at each instant, in particular for each piece of information, a measure of the total processing by the processor required at this instant and for comparing the measure to the total processing capability of the processor, and for selecting, in
15 the case where the total processing required exceeds the total processing capability, only those calculation modules which perform subfunctions that influence the transmitted information with a low degree of severity or a high degree of importance, the calculation modules not selected being inactive at this instant, not performing their subfunctions.

20 30. A processor according to claim 15, wherein the control means are arranged to select at each instant only calculation modules performing preselected ones of the subfunctions, the preselected ones influence the transmitted information with a low degree of severity or a high degree of importance.

25 31. A processor according to claim 30, wherein the control means are arranged to calculate at each instant the processing required by the preselected subfunctions and to determine the processing capability of the processor remaining after performing the preselected subfunctions and to activate calculation modules performing subfunctions different from the preselected subfunctions, the activation being made according to the calculated remaining
30 processing capability.

32. A processor according to any of claims 29 for the case where the information in the network is sent in a plurality of parallel channels having different priority levels, wherein the processor is arranged to process the information in each of the channels and to calculate at

each instant the measure of the total processing required for all of the parallel channels at this instant and comparing the measure, and in the case where the measure of the required processing required is found to exceed the total processing capability, to activate more calculating modules performing subfunctions for information sent in channels having a high

5   priority level than for information sent in channels having a low priority level.

33. A processor according to claim 29, wherein the calculation means are arranged to perform an echo cancellation algorithm.

10   34. A processor according to claim 33, wherein the calculating modules are arranged to perform subfunctions of the echo cancellation algorithm function including at least one of: filtering, filter updating, double-talk detection, non-linear processing, noise estimation, and network probing.

15   35. A processor according to claim 34, wherein the subfunctions of filtering, non-linear processing, filter updating, double talk detection, noise estimation, and network probing, taken in this sequential order, are assigned degrees of severity or importance in decreasing and increasing scales respectively.

20   36. A processor according to claim 32, wherein the control means are arranged to always activate at each instant calculating modules performing preselected ones of the subfunctions for all of the channels, the preselected ones of the sub-functions being selected to require processing not exceeding the total processing capability.

25   37. A processor according to claim 36, wherein the control means are arranged to activate at each instant the calculating modules performing the remaining subfunctions not included in the preselected ones in accordance with the total processing left after performing the preselected ones of the subfunctions.

30   38. A processor according to claim 29, wherein the control means are arranged to determine the processing required by the calculating modules for performing each of the subfunctions as the number of processor instructions used by the subfunction.

39. A processor according to claim 32, wherein the processor is arranged to handle a number of parallel channels in which information is sent in the communication network, the number being based on an average of the processing required for performing the algorithm.

5   40. A processor for processing information, in particular speech information, in a communication network in which the information is transmitted in pieces, in particular in packets or in frames, the information in the network being sent in a plurality of parallel channels having different priority levels, the processor comprising calculating means for making calculations according to an algorithm comprising a multitude of subfunctions, the

10   calculation means comprising calculation modules, each calculation module adapted to perform an individual one of the subfunctions, the processor further comprising control means for determining, at each instant, in particular for each piece of information, a measure of the total processing by the processor required for all of the channels at this instant and for comparing the measure to the total processing capability of the processor, and for activating,

15   in the case where the total processing required exceeds the total processing capability, more calculating modules performing subfunctions for information sent in channels having a high priority level than for information sent in channels having a low priority level.

41. A processor according to claim 40, wherein calculating modules are arranged to perform

20   subfunctions which influence the quality of the information sent with different degrees of severity or importance, and that the control means are arranged to activate in said case, for channels having a low priority level only those of the calculating modules which perform subfunctions that influence the information sent with a low degree of severity or a high degree of importance.

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42. A processor according to claim 40, wherein the calculation means are arranged to perform an echo cancellation algorithm.

43. A processor according to claim 42, wherein the calculating modules are arranged to

30   perform subfunctions of the echo cancellation algorithm function including at least one of: filtering, filter updating, double-talk detection, non-linear processing, noise estimation, and network probing.

44. A processor according to claim 43, wherein the subfunctions of filtering, non-linear processing, filter updating, double talk detection, noise estimation, and network probing, taken in this sequential order, are assigned degrees of severity or importance in decreasing and increasing scales respectively.

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45. A processor according to claim 40, wherein the control means are arranged to always activate at each instant calculating modules performing preselected ones of the subfunctions for all of the channels, the preselected ones of the sub-functions being selected to require processing not exceeding the total processing capability.

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46. A processor according to claim 45, wherein the control means are arranged to activate at each instant the calculating modules performing the remaining subfunctions not included in the preselected ones in accordance with the total processing left after performing the preselected ones of the subfunctions.

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47. A processor according to claim 40, wherein the control means are arranged to determine the processing required by the calculating modules for performing each of the subfunctions as the number of processor instructions used by the subfunction.

20 48. A processor according to claim 40, wherein the processor is arranged to handle a number of parallel channels in which information is sent in the communication network, the number being based on an average of the processing required for performing the algorithm.

49. A processor for processing information, in particular speech information, in a
25 communication network in which the information is transmitted in pieces, in particular in packets or in frames, the information in the network being sent in a plurality of parallel channels having different priority levels, the processor comprising calculating means for making calculations according to an algorithm comprising a multitude of subfunctions, the calculation means comprising calculation modules, each calculation module adapted to
30 perform an individual one of the subfunctions, the processor further comprising control means for determining, at each instant, in particular for each piece of information, a measure of the total processing by the processor required for all of the channels at this instant and for comparing the measure to the total processing capability of the processor, and for activating, in the case where the total processing required is found to exceed the total processing

capability, some of the calculating modules performing subfunctions for the channels in accordance with a round robin scheme for the channels.

50. A processor according to claim 49, wherein the calculation means are arranged to perform an echo cancellation algorithm.

51. A processor according to claim 50, wherein the calculating modules are arranged to perform subfunctions of the echo cancellation algorithm function including at least one of: filtering, filter updating, double-talk detection, non-linear processing, noise estimation, and network probing.

52. A processor according to claim 51, wherein the subfunctions of filtering, non-linear processing, filter updating, double talk detection, noise estimation, and network probing, taken in this sequential order, are assigned degrees of severity or importance in decreasing and increasing scales respectively.

53. A processor according to claim 49, wherein the control means are arranged to always activate at each instant calculating modules performing preselected ones of the subfunctions for all of the channels, the preselected ones of the sub-functions being selected to require processing not exceeding the total processing capability.

54. A processor according to claim 53, wherein the control means are arranged to activate at each instant the calculating modules performing the remaining subfunctions not included in the preselected ones in accordance with the total processing left after performing the preselected ones of the subfunctions.

55. A processor according to claims 49, wherein the control means are arranged to determine the processing required by the calculating modules for performing each of the subfunctions as the number of processor instructions used by the subfunction.

56. A processor according to claim 49, wherein the processor is arranged to handle a number of parallel channels in which information is sent in the communication network, the number being based on an average of the processing required for performing the algorithm.